

REMARKS

Prior to this Amendment, claims 1-12, 16-34, 36-42 and 60-73 were pending in this application. By this Amendment, Applicants have amended claims 1, 19, 24, 29, 37, 60, 69 and 72-73 without prejudice or disclaimer of the subject matter recited therein.

Applicants do not acquiesce in the Examiner's rejections, but instead have elected to make the above-mentioned amendments in an effort to expedite prosecution of this application leading to issuance of a patent. Reconsideration of the application as amended above and in view of the following remarks is earnestly solicited.

Claims Rejection under 35 U.S.C. § 103 - Duvillier in view of Kienzle, III

The Examiner has rejected Claims 1-42 and 60-73 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,749,876 to Duvillier et al. ("Duvillier") in view of U.S. Patent No. 6,478,802 to Kienzle, III, et al. ("Kienzle"). As will be explained below, Applicants respectfully submit that the above combination of references do not support the Examiner's rejection of the present claims as amended under 35 U.S.C. § 103(a).

A claimed invention is unpatentable if the differences between it and the prior art "are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. Section 103(a); see Graham v. John Deere Co., 383 U.S. 1, 14, 148 USPQ 459, 465 (1966). "The ultimate determination of whether an invention is or is not obvious is a legal conclusion based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness." In re Dembiczak, 50 USPQ2d 1614, 1616 (Fed. Cir. 1999).

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined), must teach or suggest all the claim limitations. M.P.E.P. § 2143.

Independent Claim 1

Amended independent claim 1 recites a system for cutting a bone at a desired location including, *inter alia*, a cutting block having a frame, first, second and third guides, first, second

and third adjustors, and a mounting location, wherein the first guide defines a first cutting path having a position, the position of the first cutting path relative to the mounting location being adjustable linearly using a grip of the first adjustor. Moreover, the second guide defines a second cutting path having a position, the position of the second cutting path relative to the first cutting path being independently adjustable and the position of the second cutting path relative to the mounting location being adjustable angularly using a grip of the second adjustor. Finally, the third guide defines a third cutting path having a position, the position of the third cutting path being adjustable using a grip of the third adjustor, being independently adjustable with the first cutting path and the second cutting path, angularly adjustable with respect to the second cutting path, and angularly adjustable with respect to the mounting location.

Duvillier, on the other hand, discloses an apparatus for the condylar resection of the knee for putting a prosthetic component into place. The apparatus includes a femoral cutting device having, *inter alia*, a support element and a femoral cutting blade guide, which is vertically adjustable in relation to the support element. While the cutting blade guide includes at least two blocks movable in relation to the support element and vertically adjustable in relation to one another, Applicants find no teaching in Duvillier of a structure having first, second and third guides that respectively define cutting paths that are independently adjustable angularly and/or linearly with respect to one another as required by amended independent claim 1. Moreover, the deficiencies of Duvillier are also not resolved by Kienzle, which merely describes a computer assisted surgery system for accurate positioning of a drill bit into a body part.

As neither Duvillier nor Kienzle, whether viewed alone or in combination, teach systems for cutting a bone having first, second and third guides that respectively define cutting paths that are independently adjustable angularly and/or linearly with respect to one another as required by claim 1, one skilled in the relevant art would be unable to formulate the presently claimed systems from the teachings of Duvillier in view of Kienzle. Accordingly, Applicants thereby submit that claim 1 is nonobvious over and patently distinguishable from Duvillier in view of Kienzle, whereby the rejection under 35 U.S.C. § 103 has been overcome. Reconsideration is respectfully requested.

Independent Claim 29

Claim 29 as amended recites a system for locating a planar cut through a portion of a bone including, *inter alia*, an image guided drill cylinder, a receiver, a processor coupled to the

receiver, a display coupled to the processor, and a cutting block having a frame including a first mounting location configured to connect the cutting block to the bone at the target location, a first guide adjustably mounted to the frame for movement relative to the first mounting location, the first guide defining a first cutting path adapted to guide a saw for creating the planar cut when the first guide is adjusted such that the first cutting path is in a position corresponding to the planar cut, a second guide defining a second cutting path having a position, the position of the second cutting path relative to the first mounting location being adjustable angularly and linearly with respect to the first cutting path, and a third guide adjacent the second guide and independent of the first and the second guides, the third guide defining a third cutting path angularly adjustable with respect to the first guide and the second guide.

For the reasons stated above, Applicants believe that neither Duvillier nor Kienzle, whether viewed alone or in combination, teach or suggest Applicants' claimed invention as set forth in claim 29, and particularly a system for locating a planar cut through a portion of a bone having independently adjustable guides such as required by amended independent claim 29. Accordingly, Applicants thereby submit that claim 29 is nonobvious over and patently distinguishable from Duvillier in view of Kienzle, whereby the rejection under 35 U.S.C. § 103 has been overcome. Reconsideration is respectfully requested.

Independent Claim 60

Amended independent claim 60 recites a cutting block configured to guide a cutting instrument during a bone cutting procedure including, *inter alia*, a frame, a first mounting location, a first guide coupled to the frame, a second guide coupled to the frame, a first adjustor coupled to the first guide, the first adjustor including a first grip configured to permit a user to linearly actuate the first adjustor, thereby causing linear movement of at least a portion of the first cutting path relative to the first mounting location, a second adjustor coupled to the second guide, the second adjustor including a first grip configured to permit a user to angularly actuate the second adjustor, thereby causing angular movement of the second cutting path relative to the first mounting location and to the first guide, a third guide coupled to the frame, the third guide including a third surface defining a third cutting path, third guide being independent of the first guide and the second guide, and a third adjustor coupled to the third guide, the third adjustor including a first grip configured to permit a user to linearly actuate the third adjustor thereby causing linear movement of at least a portion of the third cutting path relative to the first

mounting location.

For the reasons stated above, Applicants believe that neither Duvillier nor Kienzle, whether viewed alone or in combination, teach or suggest Applicants' claimed invention as set forth in claim 60, and particularly a cutting block configured to guide a cutting instrument during a bone cutting procedure having independently adjustable angular and linear guides such as required by amended independent claim 60. Accordingly, Applicants thereby submit that claim 60 is nonobvious over and patently distinguishable from Duvillier in view of Kienzle, whereby the rejection under 35 U.S.C. § 103 has been overcome. Reconsideration is respectfully requested.

Independent Claim 72

Claim 72 as amended recites a system for cutting a bone at a desired location, including a drill, an element attached to the drill, and a cutting block having a frame, a first guide adjustably connected to the frame, a first adjustor connected to the frame, a first mounting location defined by the frame and configured to attach to the bone at the target location, with the position of the first cutting path relative to the first mounting location being adjustable linearly using a grip of the first adjustor, a second guide adjustably connected to the frame and independent of the first guide, a second adjustor connected to the frame, with the position of the second cutting path relative to the first mounting location being adjustable angularly using a grip of the second adjustor and linearly using the first guide, and a third guide adjustably connected to the frame and independent of the first guide and the second guide, a third adjustor connected to the frame, a fourth adjustor connected to the frame, the third guide defining a third cutting path having a position, the position of the third cutting path relative to the first mounting location being adjustable angularly using a grip of the fourth adjustor and linearly using a grip of the third adjustor.

For the reasons stated above, Applicants believe that neither Duvillier nor Kienzle, whether viewed alone or in combination, teach or suggest Applicants' claimed invention as set forth in claim 72, and particularly a system for cutting a bone at a desired location having independently adjustable angular and linear guides such as required by amended independent claim 72. Accordingly, Applicants thereby submit that claim 72 is nonobvious over and patently distinguishable from Duvillier in view of Kienzle, whereby the rejection under 35 U.S.C. § 103 has been overcome. Reconsideration is respectfully requested.

Independent Claim 73

Claim 73 as amended recites a system for locating a plurality of planar cuts through a bone, including means for image guiding a drill to create a bore in a target location of the bone, means for providing first, second and cutting paths to guide a saw for creating the plurality of planar cuts, means for mounting the providing means to the bone at the target location, means for image guiding the providing means, and means for adjusting a position of the providing means relative to the mounting means, the means for adjusting including a means to adjust the first cutting path linearly, the second cutting path angularly and linearly, and the third cutting path angularly and linearly, wherein each of the means to adjust the first cutting path, the second cutting path and the third cutting path can be adjusted independently of each of the other means to adjust.

For the reasons stated above, Applicants believe that neither Duvillier nor Kienzle, whether viewed alone or in combination, teach or suggest Applicants' claimed invention as set forth in claim 73, and particularly a system for locating a plurality of planar cuts through a bone having independently adjustable angular and linear means such as required by amended independent claim 73. Accordingly, Applicants thereby submit that claim 73 is nonobvious over and patently distinguishable from Duvillier in view of Kienzle, whereby the rejection under 35 U.S.C. § 103 has been overcome. Reconsideration is respectfully requested.

Dependent Claims 2-12, 16-28, 30-34, 36-42 and 61-71

Claims 2-12, 16-28, 30-34, 36-42 and 61-71 each depend from one of independent claims 1, 29, 60, 72 and 73. Since claims 1, 29, 60, 72 and 73 are believed to be allowable for the above discussed reasons, claims 2-12, 16-28, 30-34, 36-42 and 61-71 are also believed to be allowable. Removal of the rejection and allowance of claims 2-12, 16-28, 30-34, 36-42 and 61-71 is respectfully requested. If the Examiner should disagree with the Applicants' arguments, the Examiner is asked to kindly point out with particularity where these claimed limitations are expressly disclosed within the teachings of Duvillier in view of Kienzle.

Final Remarks

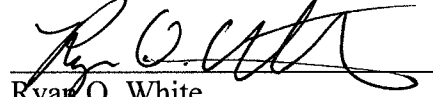
Applicants respectfully submit that claims 1-12, 16-34, 36-42 and 60-73 are now in condition for allowance. Such allowance is respectfully requested.

If necessary, Applicants request that this Amendment be considered a request for an extension of time for a time appropriate for the response to be timely filed. Applicants request

that any required fees for filing this Amendment be charged to the account of Bose McKinney & Evans LLP, Deposit Account Number 02-3223.

Respectfully submitted,

BOSE McKINNEY & EVANS

A handwritten signature in black ink, appearing to read "R. O. White", written over a horizontal line.

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